

Remarks

This amendment is a further response to the Office Action mailed September 9, 2005 (Paper No. 20050831). Claims 1-42 are pending. A Request for Continued Examination and a petition for a one-month extension of time are filed herewith.

Interview Summary

The courtesy extended by Examiner Faulcon to applicant's representative Evan Smith in a telephone interview on June 5, 2005 is noted with appreciation. In this conversation, applicant's representative referenced the discussion in the personal interview of February 27, 2006 as summarized in the remarks filed with the amendment of March 9, 2005. That discussion indicated, among other things, that the circuit disclosed in the cited Thomas reference cannot produce an interferential current and that Thomas actually teaches away from interferential treatment methods.

The Examiner requested that applicants amend the claim language to more particularly define the application of the interferential current.

Remarks on Amendments

In this amendment, the independent claims are amended to increase their clarity and not for reasons of patentability. The claims have been amended to further recite that an interferential current includes first and second signals having different first and second frequencies that interfere to create a beat signal. Since these features are inherent in the recited interferential current, the amendments do not change the scope of the claims.

Therefore, this amendment does not limit the application of the doctrine of equivalents to these claims. Further, these amendments are made without prejudice or disclaimer. Applicants respectfully traverse all rejections of the pending claims, and reserve the right to file a continuation application to continue prosecution of claims that do not include the present amendments and/or are broader in other respects.

Response to Prior Art Rejections

The pending rejections are respectfully traversed, and reconsideration is requested based on the remarks and amendments herein.

The pending claims were rejected based on U.S. Patent 5,107,835 to Thomas, either alone or combined with various other references. These rejections were fully addressed in the previous response, which is incorporated herein by reference.

The rejections based on Thomas are overcome by the recitation of interferential current application, as further clarified by the amendment herein which defines the interferential current application to the spinal column or dorsal column area. The prior art does not disclose or suggest the application of implantable electrodes to the spinal cord or dorsal column for intractable pain management, or the use of interferential current in these areas as recited in the claims.

The cited Thomas patent discloses a treatment device with a single sine wave generator and a pulse generator. The device generates a periodic-exponential signal that is inductively coupled to four electrodes. Two electrodes provide a common connection to one side of the inductor. The other two electrodes are connected to the other side of the inductor

Thomas inherently must produce the *same frequency output* through each electrode pair. It is therefore not possible for the Thomas circuit to generate an interferential signal where two different frequencies interfere to create a beat signal. Further, Thomas specifically teaches away from the idea of using sinusoidal signals (see col. 1 line 62 to col. 2 line 7). There is thus no disclosure of interferential signals, and no suggestion to apply such signals to the spinal cord and/or dorsal column for relieving intractable pain.

The other references relied upon for the pending rejections do not remedy the failure of the Thomas reference to teach anything relating to the claimed interferential signals in the claimed context. Thus, reconsideration of the pending rejections is appropriate, particular in view of the clarifying amendments herein.

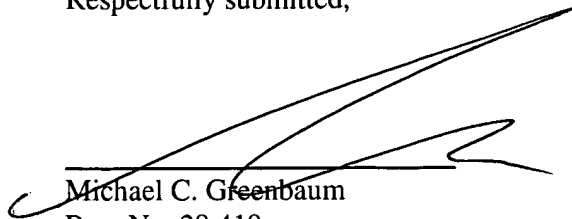
Conclusion

A Notice of Allowance is earnestly solicited. If a telephone or personal conference would expedite prosecution, the Examiner is invited to contact the undersigned, who will cooperate appropriately to advance the case.

Please charge any deficiency in fees, or credit any overpayment thereof, to BLANK ROME LLP, Deposit Account No. 23-2185 (115747-00102). In the event that a petition for an extension of time is required to render this submission timely, Applicants hereby petition under 37 C.F.R. § 1.136(a) for such an extension for as many months as are required to render

this submission timely, and request that the PTO charge the extension fee to the deposit account as authorized above.

Respectfully submitted,



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